

09/424431

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IN THE CLAIMS

Please add new Claim 2 as follows:

2. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including the step of attaching a respiration monitor to the patient through a mouthpiece that includes one or more air flow valves.

Please add new Claim 3 as follows:

3. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including the step of utilizing a computer control to provide a measure of the cyclical expiration and inhalation cycle of the patient.

Please add new Claim 4 as follows:

4. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 2, the method including the step of operating said one or more air flow valves of said mouthpiece to suspend the patient's breathing at a desired point.

Please add new Claim 5 as follows:

5. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 4, the method including the steps of halting inhalation and exhalation during the time of suspended breathing.

Please add new Claim 6 as follows:

6. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including repeating said step of suspending patient ventilation at said specific air flow direction and lung volume as necessary to administer repeated radiation doses.

Please add new Claim 7 as follows:

7. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including undertaking CT planning and treatment at a reproducible ventilatory phase.

Please add new Claim 8 as follows:

8. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including the step of applying to the patient a mechanical device for attachment to the patient's nose for temporarily halting air passage therethrough.

Please add new Claim 9 as follows:

9. The method for delivery radiation therapy to a patient during suspended ventilation according to Claim 1, the method including the steps of acquiring CT scans at different respiratory phases.

Sub B3

[Please add new Claim 10 as follows:]

10. A method for establishing breath-holding reproducibility in a patient for the delivery of radiation therapy, the method comprising the steps of:
identifying a lung volume;
suspending patient ventilation at said lung volume; and
administering radiation therapy during the suspension of patient ventilation.

Sub B4

[Please add new Claim 11 as follows:]

11. The method for establishing breath-holding reproducibility in a patient for the delivery of radiation therapy according to Claim 10, the method including the step of attaching a respiration monitor to the patient through a mouthpiece that includes one or more air flow valves.

Sub B4

[Please add new Claim 12 as follows:]

12. The method for establishing breath-holding reproducibility in a patient for the delivery of radiation therapy according to Claim 11, the method including the step of operating said one or more air flow valves of said mouthpiece to suspend the patient's breathing at a desired point.

Sub B4

[Please add new Claim 13 as follows:]

13. The method for establishing breath-holding reproducibility in a patient for the delivery of radiation therapy according to Claim 10, the method including the steps of halting inhalation and exhalation during the time of suspended breathing.

[Please add new Claim 14 as follows:]

14. The method for establishing breath-holding reproducibility in a patient for the delivery of radiation therapy according to Claim 10, the method including repeating said step of suspending patient ventilation at said specific air flow direction and lung volume as necessary to administer repeated radiation doses.

[Please add new Claim 15 as follows:]

15. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation, the apparatus comprising:

an apparatus for identifying a specific air flow direction and lung volume of the patient;

an apparatus for suspending patient ventilation at said specific air flow direction and lung volume; and

an apparatus for administering radiation therapy during the suspension of patient ventilation.

[Please add new Claim 16 as follows:]

16. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation of Claim 15 wherein said apparatus for suspending patient ventilation includes a ventilator assembly having one or more selectively operable valves.

[Please add new Claim 17 as follows:]

17. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation of Claim 15 wherein said ventilator assembly includes a t-connector which includes a first one-way valve, a second one-way valve, and a pneumotach.

[Please add new Claim 18 as follows:]

18. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation according to Claim 17 further including a computer, said first one-way valve, said second one-way valve, and said pneumotach being operably associated with said computer.

[Please add new Claim 19 as follows:]

19. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation according to Claim 18 further including a monitor for providing a readout of cyclical lung volume trace and target respiration level while the patient is breathing, said monitor being operably attached to said computer.

[Please add new Claim 20 as follows:]

20. An apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation according to Claim 15 further including a mouthpiece attached to said ventilator assembly.

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C-7